

Northwoods Journal – July 2009

A Free Publication About Enjoying and Protecting Marinette County's Outdoor Life

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EWM Management Update in Marinette County Lakes

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Area Farmers' Markets

For the last two years landowners on Thunder, Beecher, and Little Newton Lakes have been working with the LWCD to manage Eurasian water milfoil (EWM), an exotic invasive plant. In early May 2009, EWM in all three lakes was treated with the aquatic herbicide 2,4-D. This chemical was chosen because it controls EWM at a low dose rate while native pondweeds remain unaffected.

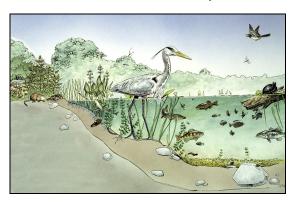
In Little Newton Lake, the association will follow up with hand pulling of scattered plants during the summer in an attempt to eradicate this recent invader. The Beecher Lake District is finalizing a plan that will include winter drawdown as a long-term EWM management tool. All three lake groups are working with the LWCD to obtain grant funding for continuing EWM management and planning.



On the Lakefront - Successful Aquatic Plant Management

By Chuck Druckrey, Water Resource Specialist

As we discussed in the last issue of the Northwoods Journal, aquatic plants are an important part of lake ecosystems and should be appreciated for the many benefits they provide. These include providing habitat for fish and providing food and cover for aquatic organisms; stabilizing sediment; and moderating the effect of nutrients. Of course, there are times when aquatic plants interfere with some of our favorite lake pastimes, primarily boating and swimming. However, with the exception of invasive exotic species, heavy plant growth is seldom a problem for lakes! In fact, abundant plant growth is often completely natural and not indicative of a problem.



Responsible and effective aquatic plant management begins with realistic goals and an honest assessment of whether the existing level of plant growth is due to some unhealthy situation or if it is the natural condition of the lake. If a lake naturally supports abundant plants, it is unrealistic to expect a sandy, weed-free bottom. A more realistic goal may be to reduce the abundance of nuisance species so other species with a "friendlier" growth form can take over. Scale is also important - it may be impractical to control plants throughout the lake when relief is only needed in a few smaller areas. In other situations whole lake management may be the best long-term solution.

Of course, developing a realistic management plan requires good information. What aquatic plants are growing in the lake? Which species are responsible for nuisance conditions? Are there new species or aquatic invasive species? These basic questions need to be answered before you can even discuss management options. For more difficult problems, or when large-scale intensive management is proposed, the need for detailed information increases. Data on aquatic plant frequency, sediment and depth preference, and aquatic plant community interactions is required. When tinkering with a system as complicated as a lake there is no such thing as too much information!

While the layman can gather some basic aquatic plant information, and can with

training become proficient at aquatic plant identification, professional assistance is often required. For basic plant ID you can take specimens to the Peshtigo DNR office or the County Land & Water Conservation Division (LWCD) office. For more detailed information you will need to work with the LWCD or hire a private contractor who can conduct a detailed survey to describe the plant community. These surveys allow detailed plant, sediment and depth contour mapping of the entire lake and reveal much about the makeup of the plant community as a whole.

With detailed knowledge in hand, it's time to start analyzing management options. Once again, it pays to have professional assistance when planning large-scale aquatic plant management projects. Activities such as lake-wide harvesting, chemical control, or seasonal drawdown can have unforeseen effects. For instance, treating large areas of plants with broadspectrum herbicides can release nutrients into the lake and fuel algae blooms, and indiscriminate plant control can open up habitat for invasive plants to colonize. Some control measures can even be counter-productive. Harvesting Eurasian watermilfoil, for example, can actually cause it to spread since it reproduces by fragmentation.



Using a harvester to manage aquatic plants.

In planning control measures, it's important to take the long view. Remember, abundant plant growth is normal in many lakes and exotic species eradication is usually impossible. For these reasons you need to choose a course of action that is sustainable. In some cases control measures need to be repeated annually. Others, such as selective herbicide treatment or winter drawdown that target nuisance species, may need to be repeated every few years.

Successful aquatic plant management plans often include multiple control measures, are flexible, and always include routine evaluation. With a strong evaluation plan you can determine if management efforts are working and make adjustments to improve efficiency and save money. Typically, evaluation requires "before" and "after" aquatic plant sampling, and could

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Later-Season Vegetable Gardening

By Scott Reuss, Marinette County UW-Extension Agriculture & Horticulture Agent

Even in our northern climate, it is not too late to plant a vegetable garden. It is definitely too late to plant some things, but there are many vegetables that do better, or taste better, in the cooler days of late summer and fall than they do during the heat and long days of mid-summer.

Most of the species shown in the example garden bed need to be planted early (April through mid-May) or else later (July 4th through mid-August) to do their best in a normal year. Cultivar selection is always a very important part of planting a later season garden, as well. For example, winter radishes will often do better than regular radishes; short-season cabbage or carrot cultivars will get mature whereas long-day cultivars may not; and branching broccoli often matures faster and has higher yields than regular broccolis. These are only a few examples, however (see chart at right).

There are some things that definitely **do not** belong in a late season garden.

What **not** to plant:

- Melons, squashes, or pumpkins
- Tomatoes, peppers, potatoes or eggplants
- Sweet corn
- Parsnips
- Rutabagas
- Dry beans
- Onions (except for green use)
- Long-season cabbage, cauliflower, carrots, or anything with a "days to maturity" rating of more than 60 (unless you have started them as plants inside).

Conversely, there are many things that will do well, especially if you are able to offer some frost protection to lengthen the season a little bit. Many of the herbs used fresh will work, but with lower yields. Almost all of the leafy greens will do acceptably well, although many of them taste better if planted after August 1, rather than during July. There are some vegetables that are marginal, but will work as long as you give them just a little bit of extra care, and pay attention to timing.



For example, green beans planted in early to mid-July will usually be very productive, but after August 5 or so, they are unlikely to get mature prior to a frost. Cabbages that you start as plants will do quite well, but they need protection from the sun when you plant them. They do not want to experience the full sun and heat of July or early August, so consider placing shade cloth of some type over them for their first few weeks, mulching around them to keep the soil cooler, and/or shading them with thin wood pieces (wooden shingles work great!) so that they do not get full sun during mid-day at least.

Many young seedlings will also have better survival if you mulch the rows lightly with straw or something similar. Do not mulch so heavily that no sun gets to the soil, but 50-80% shade may be about right. Without any soil shading, the soil surface on a full sun July day can easily get over 100 degrees, and that can literally cook young seedlings.

Other considerations:

- Watering your plants is important, especially during July and August, as the upper layers of soil may dry out fairly quickly, so pay extra attention to young plants and areas that you have just seeded.
- Frost protection is critical as September approaches. Getting your vegetables through those first cool nights with blankets isn't too hard. Most of the cabbage family plants can handle temperatures down to 26 or 27 degrees without damage. Thus, if you put pails of water around them and cover the row with blankets, you can often protect those plants for many weeks longer than you would expect. I have harvested broccoli in the city of Marinette as late as December 23rd by doing this (and having good weather).

- Plant thinning is more important for fall planting than for spring planting. Too many plants in a small area compete too much for the lower sun amounts, so make sure you thin appropriately and weed timely.
- There are fewer diseases and insects, but the insects that are present can still cause problems. The cabbage family plants will likely have many caterpillars and aphids on them if you do not monitor them, so be careful of high-protein vegetables!
- Consider planting some of these late-season vegetable or herb crops on a smaller scale in some type of containers. Although water management is more critical, you will be able to move the containers in and out of the sun to match their needs, AND move them in and out of a temperature-controlled area to get away from early frosts. For more information on the specifics of container gardening, see some of the resources on that topic at our website http://www.uwex.edu/ces/cty/marinette/hort

If you have questions about any of these concepts, or any other horticultural questions, contact Scott or Linda at the Marinette County UW-Extension office at 715-732-7510 or e-mail scott.reuss@ces.uwex.edu.

Each square represents one square foot of garden space in this example 4 foot by 8 foot garden or raised bed.

This is just an example, you can fill in these spaces however you want, but remember that there are certain crops that do not do well in small plantings or in later-season situations. See article for full details on options and management.

Radishes	Radishes	Spinach	Spinach
Leaf lettuce	Leaf lettuce	Mustard greens	Mustard greens
Swiss Chard	Kohlrabi	Turnips	Turnips
Swiss Chard	Kohlrabi	Kale/collard	Kale/collard
Green Beans	Green Beans	Green Beans	Green Beans
Beets	Beets	Green onions	Green onions
Peas	Peas	Carrots	Carrots
Peas	Peas	2 broccoli plants	1 cabbage plant

Mark your calendar for the Rural Landowners' Conference



At Crivitz High School on Saturday, September 19

Topics will include forest pests, native plants, legal issues for landowners, agriculture and horticulture opportunities, restoring native areas, attracting wildlife, and many more.



Who You Gonna Call?

Spotlighting natural resource and conservation professionals in Marinette County so you know whom to call with your questions or concerns.



Steve Kaufman, DNR Private Lands Forester 1025 Hwy C, P.O. Box 199 Wausaukee, WI 54177 (715) 856-9157 Stephen.kaufman@wisconsin.gov

Steve Kaufman joined the Wisconsin DNR as the private lands forester working out of Wausaukee last July. As the private lands forester, Steve has a variety of duties including working with landowners enrolled in the Managed Forest Law Program (the state's tax incentive program), assisting landowners with timber sales, tree planting, and any other forestry practices. Steve also does forestry work on Marinette County forest lands and state owned properties in the county, along with wildfire suppression. Steve works out of the Wausaukee ranger station and serves the townships of Stephenson, Athelstane, Silver Cliff, Middle Inlet, Wausaukee, and Wagner. Steve graduated from Crivitz High School and earned degrees in both forest management and forest administration from UW-Stevens Point. He was hired by the DNR as a forester and trained in Shawano County for a year until last July, when he began in Wausaukee as the private lands forester.

What main forestry priorities do you focus on?

I believe scrub (pin) oak regeneration, timber sale assistance, and tree planting are the three main priorities in the townships I work in. The scrub oak forests, especially those located west of Crivitz and Wausaukee on the dry sands, are declining for a variety of reasons including gypsy moth, wood borers, and oak wilt. However, the underlying reason is because the trees are around 90 years old and past maturity. With proper management, usually through a well-planned timber sale, these forest stands can be regenerated and become a healthy productive forest once again providing valuable wildlife habitat. Without management, these forests will die out and often convert to hazel brush. So, if you own a forest of scrub oak, especially if you see oak dying or declining near your forest, give me a call.

Timber sale assistance is another area that many landowners do not take advantage of. I am available to help landowners plan a timber sale and help advise them on carrying one out. The two most important elements in carrying out a

Northwoods Journal Online

Would you like to read current issues of the *Northwoods Journal* online? Go to <u>www.marinettecounty.com</u> and click on the link at the bottom of the page. We can even send you an e-mail reminder when each new issue is posted on our website. Please contact Anne Warren at <u>awarren@marinettecounty.com</u> or call 715-732-7784 for more information.

successful timber sale are:

1) Have a private, cooperating forester working with you. Cooperating foresters are non-DNR foresters who have agreed to practice sustainable forestry on all forest lands they work on. These foresters are very helpful and important, as they can mark the timber to be cut and help protect the landowner's interest when having timber cut. These foresters usually increase the income generated from a timber sale by making sure it is set up properly to maximize profits and that the harvest will increase the forest's value in the future. I can supply landowners with a list of cooperating foresters that work in Marinette County.

2) Have a signed, comprehensive contract before having a timber sale. Contracts must be written to protect the landowner and the logger. Without a proper contract, the landowner is left unprotected. Call me or a cooperating forester for advice on timber sale contracts. The following website has information on timber sale contracts and has a sample contract for landowners to review. http://dnr.wi.gov/forestry/Private/Assist/contract.htm/selling.

Tree planting is another area with a lot of opportunity for landowners. Planting trees pays off in many ways:

- It can provide income for the future.
- Planting trees improves the wildlife habitat for many species.
- Planting trees improves the aesthetics of a property.

I encourage people to look at planting areas of 5 acres or more for maximum benefits. I also strongly advise people to get advice from a forester before planting, as there are many things that can go wrong. A forester can recommend the best trees for a site and can recommend pre- and post-tree planting treatments to improve the planting's success - grass competition is one of the most detrimental issues a tree planting can face. Foresters can advise landowners on the best method of planting, and see if there are any available cost share programs for tree planting. Marinette County owns 2 tree planting machines that can be rented and tree planting bars. Call me for information on renting a tree planting machine or using the county's tree planting bars.



The forest industry in Marinette County is a very important part of the county's economy and for many citizens, it is their way of life. The county has a rich logging heritage that has come a long way from the early logging era. Logging is now much more environmentally friendly and is used as a tool to improve a landowner's woodlot when properly planned. There is now a master logger program in which a logger earns master logger status by conforming to a strict code of conduct involving both the environmental and business aspect of logging and must successfully complete a rigorous field and business practices audit. These loggers have been held to a high professional standard and have successfully done so to remain a master logger. Contact me to obtain a list of master loggers for the county.

Are there any financial programs to assist landowners with their forest?

Wisconsin's managed forest law program is a property tax reduction program that enrolls landowners in a 25 or 50 year forest management plans. This program is a unique opportunity for Wisconsin citizens, as there is no other program like it in the nation. Landowners receive tax incentives to practice sustainable forestry by following a written forest management plan written for their property. For information on eligibility, rules, and enrollment visit http://dnr.wi.gov/forestry/ftax/ or give me a call.

What's your favorite part of being a Forester?

My favorite part of being a forester is meeting landowners and walking their property with them. I really enjoy discussing ways landowners can meet their objectives (providing income, improving wildlife habitat, improving aesthetics, etc.) through proper forest management.

Go to http://dnr.wi.gov/forestry/LP-private.htm for information on a broad range of topics pertaining to private forestry.



Plant Management, continued from page 1

be done by volunteers with the proper training in sampling methods and plant identification. Since lakes are dynamic systems, the need for routine evaluation and aquatic plant community tracking never ends. On the plus side, routine evaluation increases the odds of identifying new invasive species while there is still a chance for eradication.



Chemical plant management on Bass Lake

When developing an aquatic plant management plan, it's important to involve lake residents throughout the process and keep them informed. While there are state grants available to help lake groups manage exotic species, the long-term cost of any management plan will be borne by the property owners so it's important that they support the planned course of action.

Finally, don't forget the permits! While landowners can harvest limited amounts of aquatic vegetation "by hand" without a permit in some cases, you should always check with the DNR first. Chemical application (solid or liquid), mechanical harvesting, and most other physical methods of control will require a Wisconsin DNR permit. The purpose of the permit is to protect fish habitat and assure the proposed controls are effective.

For questions about how to manage aquatic plants on your lake, grant opportunities, or other information, visit the Wisconsin Lakes Partnership online the DNR website at: www.dnr.state.wi.us/org/water/fhp/lakes/ or contact the Marinette County Land & Water Conservation Division at 715-732-



Wisconsin Wildfires: Preventing Home Ignitions, Part Two

Jolene Ackerman, WI DNR Wildland-Urban Interface Specialist Photos courtesy WI DNR

Firewise is a proactive approach to wildfire readiness. In this approach, wildfire control personnel and natural resource managers provide technical assistance through advice and recommendations. During a wildfire, they will provide emergency response. Yet ultimately, Firewise puts the primary responsibility for wildfire readiness on individual citizens and community infrastructure. When wildfire considerations are broken down to the community level, it is much easier to plan for safer community design and effective emergency response. Homeowners are best suited for preparing their property for wildfire **before** one strikes.

There are three main *Firewise* topics for consideration in fire-prone areas: 1) **Buildings.** How flammable is your residence and outbuildings? 2) **The surrounding vegetation**. How easily could a fire spread from vegetation to buildings? 3) **Access**. Could firefighters get to your residence if there were a fire in the area?



Firewise recommendations for these topics focus on the Home Ignition Zone (HIZ), an area extending 100 to 200 feet beyond each side of <u>all</u> buildings on a property. If properly modified, the HIZ provides enough distance between buildings and a wildfire to go from a situation where fire can easily spread to buildings, to a situation where the vegetation has been modified enough to become a fuel break. This increases the chance of buildings being able to survive a wildfire without outside help. Within the HIZ are three main areas where fuel reduction efforts should be concentrated:

Buildings and Just Beyond

Start by looking at your home and any other buildings on your property. Remember that anything attached to a building is part of that building. Roofs, rain gutters, fences, and decks are natural traps for leaves, pine needles, and embers from a fire. These areas should be kept free of all material that could allow embers to



Enclose decks to keep debris from collecting

smolder and start a fire. It is especially important to keep debris cleaned out from under decks as well as on top. The first 3 to 5 feet around all buildings should be kept free of all flammable materials, including any type of vegetation or wood mulch. Think of this as the "No Grow Zone." If possible, these areas should be filled in with decorative stone or some other non-flammable material, even bare soil.



"No-Grow Zone" around a building foundation

Defensible Space

The area within 30 feet around all buildings is called **Defensible Space**. If modified properly, this area can keep low intensity surface fire from reaching buildings. It can also provide a relatively safe area for firefighters to work in if they are able to help protect a residence. This area should be kept mowed short and raked free of fallen leaves and pine needles. Flower beds should be cleared of last year's dead, dry vegetation. Plantings should be carefully spaced and have more fire-resistive qualities. Remember that deciduous plants, shrubs, and trees are generally more fire-resistive than evergreens. Red pine and jack pine are the most flammable trees in the Lakes States and should be kept to a minimum in this area. Fuel breaks can be created by incorporating gravel, rock, brick, paving or a water feature into a landscape design. Tree limbs should be pruned back at least 10 feet from all buildings. Evergreens need to be pruned up 6 to 10 feet from the ground. Firewood and other flammable materials should be kept out of this area.

Outlying Areas

This zone extends out 30 to 100 feet beyond buildings. When a residence is built in a pine forest or pine plantation, this zone extends out to 200 feet. Tree limbs should be at least 10 feet apart and taller trees should have all limbs pruned within six feet of the ground. All dead or dying limbs should be removed throughout tree canopies. Dead, dying, and diseased trees should be removed from this area as well. Talk to your neighbors. Wildfire doesn't respect property boundaries. By working together to manage wildland fuels, wildfire risk can be reduced even further.

The Importance of Maintenance

Once wildland fuels have been mitigated in the Home Ignition Zone, the focus then shifts to maintenance of the area to keep the benefit of its protection. People are encouraged to keep a schedule of seasonal maintenance where roofs and gutters are cleaned and leaves and pine needles are raked. Spring is when most wildfires occur in Wisconsin and so clean up at this time of year is essential. Composting leaves, pine needles, branches, and grass clipping is a safe disposal alternative to burning. Burning this debris is a last resort and should be restricted to times when fire danger is at its lowest.

For additional information please visit dnr.wi.gov/forestry/fire or firewise.org.

County Landfill & Area Recycling Information

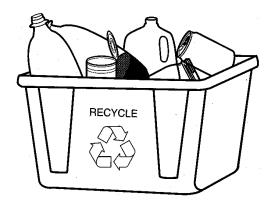
MAR-OCO County Landfill (Marinette and Oconto Counties) N7785 Shaffer Road, 5 miles west of Crivitz off of County Rd. A (715) 854-7530

2009 Hours

Monday-Friday, 8 a.m. – 4 p.m. 1st & 3rd Saturdays, April – October 8 a.m. – 12 p.m. Closed all other Saturdays, Sundays & holidays

Yard waste, any liquid waste and recyclable items are not accepted.

For more information, visit online at www.marinettecounty.com



Recycling Centers

Town of Stephenson
Twin Bridge site, County X
Tuesday, Saturday, Sunday
9 a.m. – 4 p.m.

Crivitz site, August Street Wednesday and Saturday 9 a.m. – 4 p.m.

Newspaper, cardboard, magazines, glass bottles and jars, tin cans, aluminum, plastic containers (1 & 2), used motor oil, car batteries, scrap metal & yard waste accepted. For more information visit online at http://www.stephensonwisc.com/.

Town of Peshtigo
W1945 Old Peshtigo Road
2nd, 4th, 5th Saturdays each month
8:30 a.m. – 12:30 p.m.
1st, 3rd, 5th Wednesdays each month
12:30 p.m. – 4:30 p.m.

We accept tires, appliances and air conditioners with Freon, stoves, microwaves, washers, dryers, any kind of metal (no motor vehicles), televisions, automotive oil (no cooking oil or antifreeze), paper, cardboard, plastic, glass, aluminum, tin, batteries, bagged garbage and yard waste. No paint or hazardous materials. Some fees may apply - http://townofpeshtigo.org/Recycling.htm.

Township of Athelstane (715) 856-6428 Wednesday, 12:00 – 4p.m. Saturday, 12:00 – 4p.m. Sunday, 8a.m.– 4p.m.

Cans, cardboard, brown & clear glass, magazines, paper, plastic #1 & #2, and drain oil accepted; no building materials or paint. Some yard waste accepted. Fees may apply for furniture & appliances. For more information visit: http://athelstanewi.com/recycle.htm.



CRITTERS WE LOVE TO HATE: TICKS

By Aleta DiRienzo, Database Specialist & Program Assistant



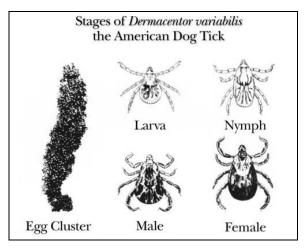
This month we are going to learn everything we wanted to know about ticks, but really didn't want to ask. There are many species of ticks throughout the world, but here in Wisconsin we are familiar with two: the Wood Tick (also known as the Brown Dog Tick) and the Deer Tick (a.k.a. Black-Legged Tick).



Deer tick on finger

Ticks are commonly thought of as insects but they are actually arachnids, related to scorpions, spiders and mites. All the members of this group have four pairs of legs as adults and have no antennae. Ticks are very efficient carriers of disease because they attach firmly when sucking blood, feed very slowly, and may go unnoticed for a considerable time while feeding. Ticks actually take several days to finish feeding. They are most often found in grasses and shrubs, where they wait for an unsuspecting host to walk by. When brushed by a moving animal or person, they quickly let go of the vegetation and climb onto the host. Ticks can only crawl; they cannot fly or jump.

When you find a tick on your scalp, they usually have crawled there from a lower position on the body. You will be most likely to encounter these critters during the summer while hiking and camping. Ticks are tiny and flat and are one of the largest mites. Ticks are parasites, and they must find a suitable host for blood. They use their claws to grab onto a host and then dig under the skin with their mouthparts. Their mouth lets out a chemical like an anesthetic to keep the host from knowing it's there. The tick can then drink as much blood as it wants.



Growth stages of the Dog Tick

The American Dog Tick is the largest of the Wisconsin wood ticks and the one you are most likely to see. It is reddish-brown with white or yellow markings. The adult male is about 1/8 of an inch long, and the female is slightly larger. She will get much larger, reaching about ½ inch after she drinks her fill of blood. These ticks are known as "three-host ticks" because they have three different host animals in their lifetime. The larva can detect a trail where mammals often travel by smell and body It will wait with its front claws outstretched ready to grab the first small animal that goes by, usually a mouse, mole, shrew, muskrat or rabbit. Larva can survive up to 11 months without feeding, and will stay on the

host from 2 to 14 days – it will then drop off and within a week molt (shed its skin) into the nymph stage. The nymph can go six months without a blood meal as it waits for the next host, which is a larger animal like an opossum or raccoon. The nymph will drink more blood and stay on the host from three to 10 days. Again, it will drop from the host and after three weeks to several months will molt into an adult. Adults can survive two years without feeding and will overwinter in the soil. Mating occurs on the host and the female engorges within six to 13 days, drops from the host to lay her eggs and then she dies.

The American Dog Tick isn't considered a serious health threat to humans, unlike their cousin, the Black Legged Tick, or Deer Tick. The Deer Tick is most known by the disease it spreads rather than by its characteristics. These ticks were brought into the public consciousness in the mid 1970's when it was discovered that they are the primary transmitter for Lyme disease. Lyme disease is a debilitating, though rarely fatal, infection that is often misdiagnosed because early symptoms resemble the flu.



Dog tick engorgement sequence

Deer Ticks are much smaller than the more common American Dog Tick. Adult female Deer Ticks are about as big as a sesame seed. Males are black; females have a brick red abdomen and a black shield near the head. Females will swell up to 10 mm when fully engorged after feeding. The life cycle of the Deer Tick is pretty much the same as the American Dog Tick. After hatching from an egg in late spring, deer ticks go through three life stages: larva, nymph and adult. Each stage requires a different host animal, and during each stage they feed only once. They need two years to complete this cycle. The larva is tan and very small, about the size of the period at the end of this sentence. Newly hatched Deer Ticks do not carry Lyme disease; they will pick it up from an infected animal. The white-footed mouse is the primary carrier and/or source of the Lyme disease bacteria. A tick that picks up the bacteria will pass it off at the next life stage and will infect future host animals. Nymphs are the size of a poppy seed and are beige in color, sometimes appearing transparent with a dark head.



"Bull's-eye" rash, one symptom of Lyme disease

During the summer months, when people (and notably children) are most active outdoors, is the time of the greatest risk of contacting Lyme

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Where in Marinette County?

Tell us where this photo was taken and you could win a prize!

To enter, send a note including your name, address, and phone number or email awarren@marinettecounty.com. Any interesting facts about the subject are also welcome. Correct answers will be entered in a drawing for a \$20 gift card from Wal-Mart. Please respond by July 13, 2009 to be entered in the drawing.



Congratulations to Sharon Schounard of Peshtigo for winning the drawing in June's "Where in Marinette County" contest! The picture below is of the "Silver Dome" dance & reception hall that used to be in Marinette. It has since been torn down.



Thanks to everyone sending in guesses and good luck to everyone with this month's photo!

Plan to Attend the Marinette County Breakfast on the Farm, Sunday, June 28

The Marinette County Breakfast on the Farm committee encourages everyone to attend the 2009 Breakfast on the Farm event being held Sunday, June 28 from 8 a.m. to 1 p.m. This year's event is being hosted by Darren and Lynn Rusch and family on their dairy farm, located 7 miles west of Beaver on Marinette County Hwy. P.

There will be a full slate of activities for participation by all members of the family, including pony rides, face painting, kiddie tractor pull, and other activities and displays. The showcase pieces of the day will be the farm itself, the agriculture-related activities, and the fabulous all you can eat pancakes, eggs, sausages, etc... for which this event is becoming known.

Admission is \$6 for adults, \$4 for ages 6 - 10, and free for 5 and under. Call Scott Reuss at the Marinette County UW-Extension office at 715-732-7510 if you have questions.



A History of Non-native Species Introduction in the Great Lakes By Robert Ruleau, Aquatic Invasive Species Coordinator



The enormous freshwater gems that are the Great Lakes have been a source of exotic species invasions dating back hundreds of years when Europeans first settled the region. With established human population on the shores of the Lakes, there was a need for goods and services to be transported and traded among the regions emerging cities including; Chicago, Milwaukee, Detroit, Cleveland and Toronto in the early to mid 1800s. The abundance of water in this region provided an efficient way to transport items with the exception of one major, natural obstacle. The Niagara Falls, which isolated the upper Great Lakes from Lake Ontario, the Saint Lawrence River and the oceans for thousands of years, needed to be bypassed to allow for shipping along this waterway. Opened in 1829, Ontario's Welland Canal, now a series of canals and locks, opened the upper Great Lakes of Erie, Huron, Michigan and Superior to small cargo ships along with the unintentional introduction of non-native species, namely fish. With the Great Lakes now exposed to the rest of the aquatic world and human transportation, it was only a matter of time before non-native species took hold among these inland freshwater seas.



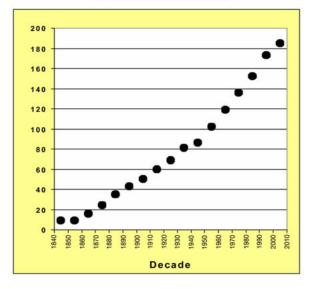
Sea lamprey attached to a fish

The eel-like, parasitic **sea lamprey**, which sucks the blood and juices out of unsuspecting fish, is thought to be the first non-native species to enter the Lakes from the Atlantic Ocean by swimming up the Welland Canal shortly after it was opened. The catastrophic impacts involving the collapse of some of the native fish populations in the mid 1900s are well documented - this collapse was most likely resulted from both fishing pressure and the arrival of the sea lamprey. In 1956, lake trout were officially declared gone from Lake Michigan and now have to be stocked regularly because the native species no longer reproduce naturally. The alewife, a productive breeder native to the Atlantic Ocean, is also thought to have swum up the Canal to enter the Great Lakes. These fish have been infamous for dying off and washing up on our shores by the millions. Non-natives have also been introduced into the Great Lakes intentionally, with benefits.

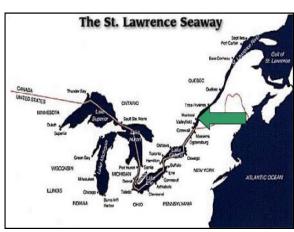
This happened in the 1960s, with the stocking of native trout species that have helped to control the alewife populations and have become a mainstay of recreational fishing on the Lakes. These fish are regularly stocked in large numbers each year.

Since the 1800s, around 185 new non-native species have been introduced to the Great Lakes ecosystem. These species include fishes, invertebrates, aquatic plants, algae and pathogens with introductions ranging from global shipping to localized aquarium release.

Time series of aquatic invaders discovered in the Great Lakes since 1840.



Most non-native introductions, however, have occurred in the past 50 years, directly coinciding with the opening of the Saint Lawrence Seaway in 1959 and the everincreasing number of ocean freighters permitted to enter the Great Lakes via the Seaway. Freighters entering the Great Lakes from the oceans provided a new and efficient pathway for foreign aquatic species to also enter the Great Lakes. These critters essentially have hitched a ride in ships' ballast water used for stabilization at sea. The problem originates when these organisms are sucked up along with the ballast from far-away global ports. They are sometimes able to survive a transoceanic journey and could eventually be discharged into one of the Great Lakes and become established. It is estimated that ships' ballast discharge has attributed to over 60% of the established aquatic invaders found in the Great Lakes. Historically, the U.S. and Canadian governments have done little to control ballast water discharge. In recent years, though, increased pressure from various Great Lake states in favor of regulating ballast water has paid off, and we are now seeing legislation go through to have ships stringently treat their ballast water before entering and discharging it into the Great Lakes.



The St. Lawrence Seaway, a major factor in the spread of invasive Great Lakes species

One of the most recognized and damaging aquatic invasive species transported in ships' ballast water to the Great Lakes is the infamous zebra mussel, and its cousin the quagga mussel. Believed to have come from the Caspian Sea in Europe and rivers in Ukraine, these invaders arrived to the Lakes in the late 1980's via ships traveling through the Saint Lawrence Seaway and have since spread to over 20 of the United States and a few provinces in Canada. Because they are such prolific filter feeders, zebra and quaggas essentially eat up vast amounts of plankton which make up the base of the Great Lakes food chain. This in turn leaves fish and other organisms to compete for a depleted resource.

Because these tiny mussels will attach to any hard substrate or material, their numerous colonies often clog industrial pipes, making it difficult for water to flow through them. Overall, the zebra and quagga mussels have been a nightmare for the Great Lakes since their introduction. They are one of a few non-native invasives that have been extremely disruptive ecologically, throwing each Great Lake ecosystem out of balance. We spend hundreds of millions of dollars each year just to control (not eradicate) them. Once a water body has zebra or quagga mussels, they cannot be eradicated, as is the case with many other invasives that have become established in our waters.

Geographically, the history of non-native species being introduced into and spread among the Great Lakes and inland waters has been one of various scales. Many of the aquatic invasive species we see in our waters have come from around the world, mostly Europe and Asia, with the help of transoceanic freighters and their ballast water. Once those freighters pass through the watery highway that is the Saint Lawrence Seaway and discharge their ballast water in any one of the Great Lakes, the potential for foreign species introduction is

Continued on page 7

Northwoods Journal Volume 7, Issue 2

The Northwoods Journal focuses on various outdoor recreation opportunities and local environmental topics to inform readers about natural resource use, management, and recreation in Marinette County.

Published in cooperation by:

- Marinette County Land & Water Conservation Division
- Marinette County Parks & Outdoor Recreation Department
- University of Wisconsin-Extension

UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA. To ensure equal access, please make requests for reasonable accommodations as soon as possible prior to the scheduled program. If you need this material in another format, please contact the UW-Extension office at 715-732-*7510*.

Please send comments to: Marinette County Land & Water Conservation 1926 Hall Ave, Marinette, WI 54143 (715) 732-7780 awarren@marinettecounty.com



Ticks, continued from page 5

disease. Make a habit of thoroughly checking yourself and others for the tiny nymph following outdoor activities. Some of the prevention techniques are:

- Walk in the center of the trail to avoid picking up ticks from grass and brush.
- Wear light colored clothing so ticks will be more visible.
- Create a barrier to ticks by tucking pants into socks or boots and tuck long sleeved shirt into pants.
- After being in tick habitat, get out of clothes immediately, do a complete body check, shower and vigorously towel dry. Wash the clothes immediately as to not spread any ticks around your living area.
- Use insect repellent with 20 30% DEET on adult skin and clothing to prevent tick bites. Permethrin is also effective against ticks and lasts for days to weeks but only should be applied to clothing not the skin!
- Non't forget to check over your four legged friends, too!

An unusual, organic approach to control of ticks and prevention of Lyme disease is the use of domesticated Guineafowl, which are voracious consumers of insects and have a particular fondness for ticks!

Please note that not all Deer Ticks have the bacteria that cause the disease and that an infected tick must be attached to the person's skin for greater than 24 hours before it can transmit the bacterium to the bitten party. The symptoms of Lyme disease will show up from 3 to 30 days after being bitten by an infected tick are:

- A bull's eye appearing skin rash
- * Fatigue
- Chills & fever
- * Headache
- Muscle & joint pain
- * Swollen lymph nodes

The later stage of Lyme disease may not present itself for weeks, months or even years after the exposure. Symptoms at this stage can include:

- Chronic arthritis in one or more joints, usually the knees, which may be swollen and painful.
- Nervous system symptoms such as numbness, pain, nerve paralysis (facial palsy), and meningitis (fever, stiff neck, & severe headache)
- Heart irregularities (rare)
- Multiple rashes
- Weakness, numbness, or pain in arms and legs
- Memory, concentration problems

Diagnosis of Lyme disease is based on signs and symptoms, presence of the characteristic rash, and a history of exposure to deer ticks. Most (but not all) people with Lyme disease will develop the characteristic bulls-eye rash, and many may not recall a tick bite. A blood test may be helpful in confirming the diagnosis. Antibiotics are used to treat the disease. Late stage Lyme disease is often difficult to diagnose because its symptoms can mimic symptoms of other diseases such as multiple sclerosis, rheumatoid arthritis, fibromyalgia, chronic fatigue syndrome, lupus or other autoimmune diseases.

In conclusion, just remember to be diligent in checking for ticks after visiting the great outdoors. On a lighter note, residents of Sawyer County have a good time with the wood tick season - every spring at the Oxbo Resort on the shores of the Flambeau River the 'International Wood Tick Races' are held. People come with their Ziploc bags or matchboxes filled with ticks and the hopes of owning the fastest tick in the races (the resort even has a stable in case you didn't bring a tick with you). Ticks race from the center of a bulls-eye to the outer edge and elimination rounds end up with the championship race. After each heat, the mayor smashes the losing tick with his gavel; it is a contest and a public service rolled into one!

For more information about ticks and Lyme disease prevention:

www.fcps.edu/islandcreekes/ecology/american_dog_tick.htm
www.cdc.gov/ncidod/dvbid/Lyme/ld_transmission.htm
www.uri.edu/ce/factsheets/sheets/deerticks.html
www.idph.state.il.us/envhealth/pccommonticks.htm
http://animals.nationalgeographic.com/animals/printable/deer-tick.html
www.health.state.mn.us/divs/idepc/diseases/lyme/lyme3fold.html
http://en.wikipedia.org/wiki/Lyme_disease
http://webpages.charter.net/balplanman/_MicPix/Ticks/Ticks.html
http://www.tickinfo.com/

UWEX Deer Tick Control by Phil Pellitteri-UW Insect Diagnostic Lab UWEX Lyme disease Awareness Prevention & Intervention Fact Sheet

Non-native species, continued from page 6

highly increased. Other likely mechanisms of introduction and spread of non-natives include the aquarium and gardening trade; accidental and deliberate release by humans; and species migrating through water ways, as we have seen with many non-native fish. At the state level here in Wisconsin, we need to be concerned about the nonnative species that have been introduced into the source waters of Lake Michigan, including Green Bay and Lake Superior. These waters are no doubt the major source where harmful invasive species such as Eurasian water-milfoil, zebra mussels and rusty crayfish originate and often get transported by recreational users to the inland waters of Wisconsin, including Marinette County. So it becomes increasingly important that we focus our efforts on preventing the initial introduction and spread of aquatic invasive species to unaffected waters. The Saint Lawrence Seaway may have opened the door wide open to non-native species in the Great Lakes, but here at the local level we are in a position to prevent their unwanted presence in our inland waters.



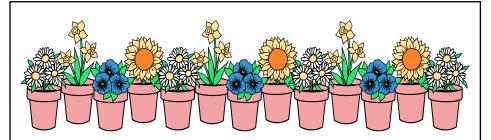
For more information on Great Lakes history & invasive species:

Great Lakes Commission – Aquatic Nuisance Species http://www.glc.org/ans/

Great Lakes St. Lawrence Seaway http://www.greatlakes-seaway.com/en/

History of the Great Lakes. Volume I http://www.hhpl.on.ca/greatlakes//Documents/hgl/default.asp

U.S. Geological Survey (USGS) – Invasive Species http://www.glsc.usgs.gov/main.php?content=research_invasive&title = Invasive%20Species0&menu=research



Join us on a Prairie Walk at Harmony Arboretum!

Ever wonder what kinds of flowers live in the prairies and grasslands of Wisconsin? Join Marinette County staff on a free guided hike through the Harmony Arboretum prairie on Thursday, August 6 from 6:30-8:00 p.m. to learn more about our native prairie ecosystems and the plants and animals that live there. You might see native plant species such as coneflowers, goldenrods, compass plants, and butterfly weed, and observe what a native prairie probably looked like before European settlement. For more information call the Land & Water Conservation Division office at 715-732-7780. Harmony Arboretum is located 7 miles west of Marinette, $\frac{1}{2}$ mile south of State Highway 64 on County E. It is open year-round to the public and there are many fun and interesting learning opportunities available - see the schedule of programs, classes, and special events on page 8. Come learn with us!

Area Events Calendar

June-August Bands at Badger Park. Free musical entertainment, 6:30-8:30pm. All concerts held Wednesday evenings 6:30-8:30pm with concessions available at 5pm. Questions call Jenni at

715-938-0695.

June-August Concerts in the Park. Free concerts, Thursday evenings at the Great Lakes Memorial Marina Park in Menominee, MI. Contact the Marinette/Menominee Area Chamber of

Commerce at (800) 236-6681.

June-August Sunset Concert Series. Free concerts Tuesday evenings on Stephenson Island in Marinette -

contact the Marinette/Menominee Area Chamber of Commerce at (800) 236-6681.

June-August Music & Movies in the Park. Crivitz – Thursdays throughout the summer as scheduled. Visit www.crivitz.com for schedule and more information.

June 8-Aug. 13 Supervised Playgrounds open for season at Fred Carney Park, Duer Gym and Garfield Elementary school. Free supervised play including arts and crafts, games, sports Monday through Thursday from 9am-3pm rain or shine. Free breakfast and lunch provided by the School District of Marinette. Pre-register at the Civic Center, 2000 Alice Lane or on site at each facility. Call 732-5222 for more information

July 4-5 Area 4th of July Celebrations. Marinette, Crivitz, Goodman, Wausaukee. For more information, call local city hall or visit the county calendar at www.marinettecounty.com.

July 2-6 Vietnam Moving Wall at Marinette High School. The Moving Wall is a tribute to the 58,253 service people who gave the ultimate sacrifice for our country. Donations are needed for hosting this memorial. Donations can be mailed to Forward Financial Credit Union with check payable to Tri-City Optimist Donation. Questions call Don Sheets at 715-587-7538.

July 8 Everybody's Birthday Family Water Bash at the Marinette Civic Center, 6:15-8:15pm. Birthday party fun and games throughout the evening including pin the tail on the donkey, water balloon toss and birthday cake. Regular admission rates apply. Call 732-5222 for more information.

July 11 Aurora MACC Run/Walk. 8am, 5k run/walk and 10k run – separate children's half mile race. Medals, refreshments and much more. Race starts at Marinette High School. Major sponsors are Aurora Health Care, CenturyTel and Marinette Menominee Chamber of Commerce. For more information call 715-735-6681 or visit www.mandmchamber.com.

July 17-19 Cruisin' Concert & Car Show at Green's Green Acres, 6 miles west of Marinette, off Hwy. 64. Enjoy our blast from the past, main stage performances, band jam, Saturday car show & dance contest. Call 715-789-2207 for information/tickets or 715-789-2130 camping.

July 18 Peshtigo Community Day sponsored by the Peshtigo Chamber of Commerce. Craft and home based business and flea market vendors welcome. Rent is \$10 per parking space before July 4, \$15 after. Interested call Pat at 715-582-3360 or www.peshtigochamber.com.

Aug. 6-9 27th **Annual Menominee Waterfront Festival.** Once again, you can expect food booths, entertainment, kids' stuff, a 5- and 10-k walk/run, a parade, fireworks and more fun for the whole family. Call Joe Plautz at (906) 863-2679 for more information.

Children's Learning Garden Project Receives Grants!



The Northern Lights Master Gardeners Association (NLMGA) recently received several grants for developing the Children's Learning Garden (CLG) at the Harmony Arboretum & Demonstration Gardens, located 7 miles west of Marinette off of highway 64 on county road E.

NLMGA received \$1,000.00 from the Wisconsin Natural Resources Foundation's C.D. Besadny Conservation Grant Program to develop a wetland exploration area, which will contain native plants and flowers such as bulrushes, sedges, cardinal flowers, and arrowhead. This wetland area will be an ideal place for children to learn about wetlands and get a closer look at this complex type of habitat.

The second grant received was from the Youth Advisory Committee of the M&M Area Community Foundation for \$1,013.00. Funds will be used to purchase plants, seeds, and general building supplies, such as lumber and hardware, needed to build individual garden components. Garden components will include a "critters'-eye view" underground tunnel, a hedge maze, educational displays, and a giant sundial.

The purpose of the CLG is to provide area children the opportunity to explore and observe nature in a unique, exciting, and educational manner, and the experiential nature of the garden will encourage visitors to "get their hands dirty" while learning and having fun. Other partners involved with the CLG project include Marinette County UW-Extension and the Land & Water Conservation Division. This project is phase three of a seven-year Master Plan instituted in 2006 to develop the Harmony Arboretum & Demonstration Gardens into a public outdoor learning facility. Harmony Arboretum is always open and free to the public year-round – see the schedule above for upcoming public programs.

Harmony Arboretum Schedule of Events

Located 7 miles west of Marinette, ½ mile south of State Highway 64 on County E. *All programs are free unless otherwise stated.* For more information, call UWEX at 715-732-7510 or LWCD at 715-732-7780.

July 18: Harmony Open House, 9:00 a.m.-1:00 p.m. – Join UWEX and the NLMGA as they showcase the happenings at the Arboretum. Demonstrations, talks, and presentations.

July 28: Vegetable Extravaganza, 6:30 p.m.-8:30 p.m. – Although zucchini sometimes gets a bad rap, the summer squashes are some of the most versatile vegetables in our gardens. This event will highlight the variation of summer squashes available, dozens of recipes to sample, zucchini car and boat races, and many other events. Come join the fun!

August 6: Prairie Walk, 6:30 – 8:00 p.m.

Late summer is the time when prairie flowers bloom and grasses turn golden, and a wonderful time to spend an evening in the prairie! During the program, Marinette County staff will talk about what exactly a prairie is, why and how people restore prairies today, and how to identify different kinds of prairie plants.

August 8: Plant Pest Clinic, 8:30 a.m. to noon – What's eating at your garden? Or causing fuzzy or slimy leaves or fruit? Bring your pest samples and have them accurately identified and get management tips on how to combat them now and in the future.

August 20: Cooking with Herbs, 6:00 - 8:00 p.m. – Join UWEX staff and Master Gardeners to explore growing and cooking with herbs. Find out how to mix herbs to create a salt substitute; learn the best storage methods, and taste many examples of culinary herbs in delicious, easy-to-make recipes (\$2.00 charge to cover handout materials).





Area Farmers' Markets

Marinette Farmers' Market. Tuesday, Friday, and Saturday mornings at Main Street Market, Merchants Park, corner of Main & Wells Streets.

Menominee Downtown Farmer's Market. Marina bandshell, thru Sept. 31. Saturday market from 9-11am and Thursday market starts from 3-7pm.

Crivitz Flea & Farmers' Market. Thursday mornings in the Crivitz Town Hall parking lot.

Crivitz Farmer's Market - Green Thumb Garden Shoppe. July 11-Oct.10, Saturdays only. Corner of County Hwy A and Mira Ave in Crivitz.

Amberg Flea & Farmers' Market. Occasional Saturdays, at Amberg Antiques & Sweets, Highway 141. More information & schedule, 715-759-5343.

Amberg Farmer's Market. Saturdays from May through October. Downtown Amberg.

